

# Climate and human health: Synthesizing environmental complexity and uncertainty

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#### Abstract:

Broad relationships between weather and human health have long been recognized, and there is currently a large body of research examining the impacts of climate change on human health. Much of the literature in this area examines climate-health relationships at global or regional levels, incorporating mostly generalized responses of pathogens and vectors to broad changes in climate. Far less research has been done to understand the direct and indirect climate-mediated processes involved at finer scales. Thus, some studies simplify the role of climate and may over- or under-estimate the potential response, while others have begun to highlight the subtle and complex role for climate that is contingent on other relevant processes occurring in natural and social environments. These fundamental processes need to be understood to determine the effects of past, current and future climate variation and change on human health. We summarize the principal climate variables and climate-dependent processes that are believed to impact human health across a representative set of diseases, along with key uncertainties in these relationships. © Springer-Verlag 2007.

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### **Resource Description**

#### Early Warning System:

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

A focus of content

Exposure: M

weather or climate related pathway by which climate change affects health

Air Pollution, Precipitation, Temperature

**Temperature:** Extreme Heat

Geographic Feature: M

resource focuses on specific type of geography

None or Unspecified

## Climate Change and Human Health Literature Portal

Geographic Location: M

resource focuses on specific location

Global or Unspecified

Health Impact: M

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: Airborne Disease, Foodborne/Waterborne Disease, Vectorborne Disease,

Zoonotic Disease

Airborne Disease: Coccidioidomycosis (Valley Fever)

Foodborne/Waterborne Disease: Cholera

Vectorborne Disease: Mosquito-borne Disease

Mosquito-borne Disease: Malaria

Zoonotic Disease: Hantavirus Pulmonary Syndrome

Mitigation/Adaptation: **☑** 

mitigation or adaptation strategy is a focus of resource

Adaptation

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Low Socioeconomic Status

Resource Type: M

format or standard characteristic of resource

Review

Timescale: M

time period studied

Time Scale Unspecified